

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Cuckler et al.

Reissue Application for:

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issued August 3, 1999

Art Unit:

Examiner:

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For: ACETABULAR RING PROSTHESIS WITH REINFORCEMENT
BUTTRESS

Attorney Docket No. 10557/247605
Date: August 1, 2001

BOX REISSUE
Commissioner of Patents
and Trademarks
Washington, D.C. 20231

AMENDMENT

Sir:

This preliminary amendment is respectfully submitted in connection with the
above-referenced application.

IN THE SPECIFICATION

Kindly rewrite the title as follows:

--Acetabular Ring Prosthesis With Reinforcement Member--

IN THE CLAIMS

Kindly add the following new claims:

--47. An acetabular prosthesis, comprising:

- (a) a cup member having (i) an inner, distal concave surface adapted to receive a liner, (ii) a containing portion formed on the inner, distal concave surface that extends at least partially circumferentially around the cup member, (iii) an outer, proximal convex surface, and (iv) a plurality of openings;

- (b) at least one fixation member extending from the cup member and adapted to affix the cup member to a patient's bone in use, wherein the at least one fixation member extends from the outer, proximal convex surface of the cup member such that the containing portion defines at least a slight ridge between the inner surface and the at least one fixation member, the containing portion adapted to at least partially contain flow of securing material.

48. The acetabular prosthesis of claim 47, wherein the at least one fixation member comprises a plurality of fixation members.

49. The acetabular prosthesis of claim 47, wherein the at least one fixation member is angled relative to the cup member.

50. The acetabular prosthesis of claim 47, wherein the at least one fixation member includes a plurality of holes.

51. The acetabular prosthesis of claim 47, wherein the at least one fixation member is integral with the cup member.

52. The acetabular prosthesis of claim 47, wherein the at least one fixation member is at least partially bendable.

53. The acetabular prosthesis of claim 47, wherein the at least one fixation member extends from the cup member in a direction angled relative to the diameter of the prosthesis.

54. The acetabular prosthesis of claim 47, wherein the at least one fixation member extends generally laterally from the cup member.

55. The acetabular prosthesis of claim 47, wherein the at least one fixation member extends generally medially from the cup member.

56. An acetabular prosthesis, comprising:

- (a) an at least partially cup-shaped device having an inner concave surface for (i) receiving a liner adapted to be cemented within the device and (ii) having a securing member defining a lip between the inner concave

surface of the device and at least one fixation member, the lip extending at least partially circumferentially around the device to help secure cement between the cup-shaped device and a liner; and

- (b) at least one fixation member extending from the device proximal to the lip, adapted for fixation of the device in a patient's acetabular region.

57. The acetabular prosthesis of claim 56, wherein the device has a plurality of openings for use as bone screw receptive openings or for allowing cement to flow through the device.

58. The acetabular prosthesis of claim 56, wherein the at least one fixation member comprises a plurality of fixation members.

59. The acetabular prosthesis of claim 56, wherein the at least one fixation member is angled relative to the device.

60. The acetabular prosthesis of claim 56, wherein the at least one fixation member includes a plurality of holes.

61. The acetabular prosthesis of claim 56, wherein the at least one fixation member is integral with the device.

62. The acetabular prosthesis of claim 56, wherein the at least one fixation member is at least partially bendable.

63. The acetabular prosthesis of claim 56, wherein the at least one fixation member extends from the cup member in a direction angled relative to the diameter of the prosthesis.

64. The acetabular prosthesis of claim 56, wherein the at least one fixation member extends generally laterally from the device.

65. The acetabular prosthesis of claim 56, wherein the at least one fixation member extends generally medially from the device.

66. An acetabular prosthesis, comprising:

- (a) a cup body for receiving a liner adapted to be cemented within the cup body;
- (b) the cup body having at least two fixation members extending from the cup body for fixation of the cup body to a patient's acetabular region, the fixation members having a plurality of openings;
- (c) the cup body further defining a securing member surface forming at least a slight ridge where the fixation members extend from the cup body, the securing member surface extending at least partially circumferentially around the cup body and in use adapted for at least

one of: at least partially containing cement in place, at least partially securing a liner in position, at least partially maintaining cement in contact with the liner at the securing member surface, at least partially preventing the cement from traversing from the cup body to the fixation members, and any combination thereof.

67. An acetabular prosthesis, comprising:

- (a) a cup having fixation members each of which intersect the cup at an intersection region;
- (b) a liner received within the cup;
- (c) a cement mantle securing the liner to the cup;

wherein the cup comprises a support lip that extends at least partially circumferentially beyond the intersection region and at least partially distal to the intersection region, precluding a smooth transition surface between the cup and the fixation members such that the support lip supports and maintains at least one of the cement mantle and the liner in place.

68. The acetabular prosthesis of claim 67, wherein the cup has a plurality of openings for use as bone screw receptive openings or for allowing cement to flow through the cup.

69. The acetabular prosthesis of claim 67, wherein the fixation members are angled relative to the cup.

70. The acetabular prosthesis of claim 67, wherein the fixation members include a plurality of holes.

71. The acetabular prosthesis of claim 67, wherein the fixation members are integral with the cup.

72. The acetabular prosthesis of claim 67, wherein the fixation members are at least partially bendable.

73. The acetabular prosthesis of claim 67, wherein the fixation members radially or non-radially extends from the cup body.

74. The acetabular prosthesis of claim 67, wherein the fixation members extend from the cup member in a direction angled relative to the diameter of the prosthesis.

75. The acetabular prosthesis of claim 67, wherein at least one of the fixation members extends generally medially from the cup body.

76. A acetabular cup prosthesis for cement implantation, comprising:

- (a) a cup member having a distal side with an inner concave surface and a proximal side with an outer convex surface;

- (b) the cup member having an edge that extends about a periphery of the cup member;
- (c) a plurality of extending attachment members each of which extends a partial distance around the cup member and away from the edge;
- (d) a portion of the edge being defined in part by the cup member and in part by the extending attachment members, wherein the edge inhibits a smooth transition surface between the cup member and the extending attachment members and in use adapted to capture at least a portion of cement used within the cup member, the edge extending at least slightly distally from the extending flange portions.--

REMARKS: STATEMENT OF SUPPORT

The invention as claimed is an acetabular prosthesis for cement implantation that provides a buttress portion for containing or securing a mass of cement, as well as a liner that registers with the cup body. First, the claims as issued recite a buttress as the cement containing or securing portion. However, the disclosure does not limit this function only to a buttress. Instead, the portion could be any type of member that reinforces or contains cement in the cup or that maintains the liner in position, such as a containing portion, a securing member surface, a support lip, a slight ridge, or any other device that acts to contain cement and secure the liner in place. Particularly, the specification discloses the purpose of the buttress as helping to "secure a mass of cement in between the cup body and the polymeric liner" and that it "can be used to contain bone cement in a mass to aid in holding the polyethylene ("all poly") liner in position." See col. 2, lines 63-65; col. 5, lines 1-5, respectively.

Accordingly, support for the newly presented claims appears in at least Figures 5-7 and 12-15, and in the specification at least at column 2, line 20 - column 3, line 6 and at column 5, lines 1-7. Accordingly, the additional claims have been added because the patentees literally claimed less than they had a right to claim, in accordance with 35 U.S.C. § 251.

Applicants have made no changes to the specification or to the drawings contained in the original patent. Upon entry of the present amendment, claims 1-76 will be pending in this Application.

Version with Markings to Show Changes Made

In the specification:

Kindly amend the title as follows:

--Acetabular Ring Prosthesis With Reinforcement [Buttress] Member--

In the claims:

The changes include submitting newly presented claims 47-76, as written above.

CONCLUSION

Applicants submit that these amendments appropriately define the claimed subject matter and respectfully requests re-issuance of claims 1-76.

Respectfully submitted,



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